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* proposed claim amendments

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Application No: 10/639,677
Attorney's Docket No: ALC 3414CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

* 1. (Currently Amended) An apparatus that establishes services that utilize policy-enabled resources in a communications network, comprising:
2. a first policy enforcement point (PEP) ^{within a first domain,} residing on a network element of the
3. communications network, that identifies performs identification of policy-enabled
4. resources that are available and allocates requested policy-enabled resources to
5. services;
6. a first network resource controller (NRC) ^{the first} _{within [a] domain} on the
7. communications network that makes requests, from available policy-enabled
8. resources, of any policy-enabled resources within ^{the} first domain required to
9. establish a particular service, ^{the requests from the available policy enabled}
10. resources being separate from the identification of the policy enabled resources; and
11. within the first domain
12. a first resource policy layer (RPL) ^{that establishes provisions, to a the} particular service being established, and provisions the policy-enabled resources
13. allocated to that the particular service, said first resource policy layer including a
14. first policy description protocol decision point (PDP), wherein:
15. wherein policy management is separated from the management of policy enabled resources, and 2.

wherein policy management is separated from the management of policy enabled resources, and 2.

a direct contact

16 said first NRC acts as a trusted entity that initiates an association

17 between said first PEP and said first PDP,

18 said first PDP provides said first PEP with a policy policies upon
19 contact
establishment of said association between said first PEP and first PDP, and

20 when said first NRC requires resources from a second domain outside
21 the first domain, said first NRC signals a request to a second NRC in said

22 second domain, which acts as the trusted entity that initiates an association
a direct contact

23 between a second PEP in said second domain and said first PDP, said first
24 PDP providing said second PEP with a policy the policies upon establishment
25 contact
26 of said association between said second PEP and said first PDP, whereby
27 there is a decoupling of policy management from the management of policy-
enabled resources.

Currently Amended

* 1 2. (Previously Presented) The apparatus as defined in claim 1, wherein said
2 first PEP comprises a plurality of virtual PEPs, each virtual PEP being associated
3 with
3 with a respective service.

1 3-5. (Canceled)

* 1 6. (Currently Amended) The apparatus as defined in claim 1, wherein the
2 apparatus further comprises:

3 a second RPL associated with a the second domain comprising ~~a~~ ^a the second
4 [[PEP]] PDP.

1 7. (Canceled)

1 8. (Previously Presented) The apparatus as defined in claim 1, wherein resource
2 capability information descriptors are used for resource discovery and policy
3 provisioning.

* 1 9. (Currently Amended) A method of establishing services that utilize policy-
2 enabled resources in a communications network, comprising:

3 identifying, at a first policy enforcement point (PEP), policy-enabled
4 resources within a first domain that are available and allocating requested policy-
5 enabled resources to services;

6 requesting, from available policy-enabled resources at a first network
within the first domain,
7 resource controller (NRC) *any* policy-enabled resources required to establish a
8 particular service, *the requesting step being separate from the identifying step;* *within the*
9 establishing the particular service with a first resource policy layer (RPL); *first domain*

10 and *with the first resource policy layer*
11 *provisioning* *to a* the established service being established at a first resource
12 policy-layer (RPL), the policy-enabled resources allocated to *that* the established

13 service, said first resource policy layer including at least one—a first policy
14 description protocol decision point (PDP), wherein policy management is separated from the
15 said first NRC acts as a trusted entity that initiates an association between
16 said first PEP and said first PDP,
17 said first PDP provides said first PEP with a policy policies upon
18 establishment of said association between said first PEP and said first PDP, and
19 when said first NRC requires resources from a second domain outside the
20 first domain, said first NRC signals a request to a second NRC in said second
21 domain, which acts as the trusted entity that initiates an association between a
22 second PEP in said second domain and said first PDP, said first PDP providing said
23 second PEP with a policy—the policies upon establishment of said association
24 between said second PEP and said first PDP, whereby there is a decoupling of policy
25 management from the management of policy-enabled resources.

1 10. (Canceled)

1 11. (Currently Amended) The method as defined in claim 9, wherein virtual
2 PEPs of a main the first PEP are provisioned to provide resource services.

1 12. (Previously Presented) The method as defined in claim 11, wherein the
2 virtual PEPs are provisioned to provide services in said second domain.

1 13. (Previously Presented) The method as defined in claim 12, wherein said first
2 PEP and said second PEP are provisioned with the same service by said first PDP.

1 14-16. (Canceled)

* 1 17. (Currently Amended) The apparatus as defined in claim 1, wherein the first
2 PEP and the second PEP are virtual PEPs created upon request for ^{said} [a]
3 particular service by one of the first NRC and the second NRC.

* 1 18. (Currently Amended) The method as defined in claim 9, wherein the first
2 PEP and the second PEP are virtual PEPs created upon request for ^{said} [a]
3 particular service by one of the first NRC and the second NRC.

Canceled

* 1 19. (Currently Amended) An apparatus that establishes services that utilize
2 policy-enabled resources in a communications network, comprising:
3 a first network resource controller (NRC) within a domain on the
4 communications network, said first NRC requesting, from available policy-enabled
5 resources, any policy-enabled resources required to establish a particular service;
6 a virtual first policy enforcement point (PEP) residing on a network element
7 of the communications network that is created upon requesting the particular

8 service, said virtual PEP identifying policy-enabled resources that are available and
9 allocating requested policy-enabled resources to the particular service;

10 a resource policy layer (RPL) that establishes the particular service and
11 includes including a policy-description protocol-decision point (PDP), wherein the
12 virtual PEP is provided with information to contact the PDP of the RPL in order to
13 provision the policy-enabled resources allocated to the particular service.

Canceled

* 1 20. (~~Currently Amended~~) A method of establishing services that utilize policy-
2 enabled resources in a communications network, comprising:

3 requesting, from available policy-enabled resources at a first network
4 resource controller (NRC), any policy-enabled resources required to establish a
5 particular service;

6 creating a virtual first policy enforcement point (PEP) upon requesting the
7 particular service;

8 identifying, at the virtual PEP, policy-enabled resources that are available
9 and allocating requested policy-enabled resources to the particular service;

10 providing the virtual PEP with information to contact a policy descriotion
11 protocol-decision point (PDP) of a resource policy layer (RPL);

12 establishing the particular service with a first resource policy layer (RPL);
13 and

14 provisioning, to the particular established service being established at the
15 resource-policy-layer (RPL), the policy-enabled resources allocated to the particular
16 service.